

that it will at all detract from the merit of Decaisne, or from the obligations which the algologist will owe to him. Not only in any case will his theory be regarded as most ingenious and as indicative of great powers of observation, but algologists will have to thank him, in combination indeed with one or two of his countrymen (not forgetting the younger Agardh), for showing how Algæ ought to be studied, and will acknowledge his title to be regarded as one of the prime leaders in the new school of algology.

*Synopsis Floræ Germanicæ et Helveticæ.* Auctore G. D. J. Koch.  
Editio 2. Pars I. 8vo. Frankfort, 1843.

This is the first portion of a new edition of Koch's extremely valuable 'Synopsis,' and we rejoice to add that the second and concluding part is in active preparation. The whole work has been carefully revised, and we find very numerous alterations and improvements, although we fear that some of the plants newly introduced as species will not sustain the rank to which they have been raised. This half of the volume extends to 452 pages, and, following the arrangement of the former edition, includes the natural orders as far as the middle of the Compositæ. Any recommendation of the work is quite unnecessary; it and its author are too well known to require it.

#### PREPARING FOR PUBLICATION.

*A History of the Fossil Insects in the Secondary Rocks of England.*  
By the Rev. P. B. Brodie, M.A., F.G.S. The author proposes to connect the results of his investigations in this interesting branch of fossil zoology, illustrating the text by numerous plates of the most characteristic specimens in his large collection of insect remains.

Subscribers' names will be received by the publisher, Mr. Lee, Bookseller, High Street, Cheltenham.

*The Ray Club.*—Under this name it is proposed to institute a Society for the objects explained in the following prospectus. Persons intending to become members are requested to forward their names and addresses, at their earliest convenience, to Dr. Geo. Johnston, Berwick-upon-Tweed, who has consented to act as Secretary until the feasibility of the project has been ascertained, and a Council appointed.

*Prospectus.*—I. The Ray Club shall have for its object the promotion of Natural History by the printing, and circulation among its members, of original works on Zoology and Botany; of new editions of works of established merit; of rare Tracts and MSS. which throw light on the history of these branches of science; and of translations of such foreign works as tend more directly to illustrate the Zoology and Botany of the British Islands.

II. Every subscriber of one guinea annually, payable in advance, to be a member of the Club, and to have a vote in the election of its office-bearers. The first payment to become due on the 2nd of February 1844.

III. The management of the Club shall be vested in a Committee or Council of thirteen members. The Secretary to be *ex officio* a member of the Council, and to be paid such amount of salary as to the Council may appear to be a fair remuneration of the trouble attached to the office.

IV. The annual subscription shall be deposited in a chartered Bank in the name of the Secretary and two members of the Council; and the fund shall be exclusively applied in publishing such works as the Council shall sanction.

V. The accounts of the receipt and expenditure of the Society shall be examined annually by two Auditors appointed by the Council,—the Auditors to be members of the Club who are not members of Council,—and their statement circulated among the subscribers.

VI. The Publications of the Club shall be confined to members only, excepting in cases where the Council may otherwise determine by a unanimous vote. When the work selected is original, an arrangement may be made with the author for extra-copies,—the Club being always secured against any charge for the same.

VII. The number of volumes to be printed annually must depend on the amount of subscriptions, and the size and nature of the volumes selected; but the Council will be directed to divide the fund as equally as possible in the printing of the Botanical and Zoological departments. At least one volume in Zoology and one in Botany should be published annually.

VIII. The works which the Club shall endeavour to print may be arranged under the following heads:—

(1.) Original works in Zoology and Botany, more especially such as illustrate the Natural History of Great Britain and Ireland.

(2.) A uniform edition of approved works which, when chronologically arranged, shall present a complete and perfect view of the progress of the Natural History of the British Islands. The works selected to be edited by competent individuals, who may add prefaces and notes where these may be thought necessary.

(3.) The collection of Memoirs, Essays, Tracts, &c., scattered in the Transactions of learned Societies and elsewhere, into convenient volumes, and on a systematic plan.

(4.) The MSS. preserved in the British Museum, and other public repositories, relating to the Natural History of Great Britain, &c.

(5.) A Systematic History of the Zoology and Botany of the British Islands.

(6.) A 'Systema Naturæ.'

(7.) A Descriptive and Systematic Catalogue of all printed books in Zoology and Botany.

N.B.—These rules, &c. are to be understood as provisional, and are intended only to give an idea of the objects for the accomplishment of which the Ray Club is projected. If the Club meets with that support from naturalists which it seems to merit, more efficient and better defined rules may be made by the Council, whose election will be in the hands of the members in general.

## ROYAL SOCIETY OF EDINBURGH.

The first ordinary meeting of the 61st session of the Society was held on Monday the 4th of December at 8 P.M.

Sir T. Makdougall Brisbane, Bart., President, in the Chair.

Professor Christison read a paper having the following title:—"On the Influence of various circumstances in Vegetation upon the Activity of Plants." Part II. The Umbelliferous Narcotics, of which the following is a summary:—

In the first part of this inquiry the author gave an account, in 1840, of some observations made by him as to the influence of season on the activity of the acrid plants of the natural family *Ranunculaceæ*, and of the narcotics belonging to the family *Drupaceæ*. In the second part now laid before the Society he proceeded to relate a series of experiments instituted by him with the view of determining the influence of season on the activity of the poisonous narcotic plants of the family *Umbelliferae*.

The plants belonging to this family are for the most part aromatic and stimulant, and destitute of poisonous properties. In four species only have narcotic properties been unequivocally recognised, viz. *Conium maculatum*, *Ceanothe crocata*, *Cicuta virosa* and *Æthusa Cynapium*; but these are universally held to be highly energetic.

1. The *Conium maculatum*, Common Hemlock. No accurate information is yet possessed as to the influence of season on the activity of this species; for all investigations on the subject are vitiated by the uncertain strength of its preparations, and the ignorance which prevailed till very lately as to the conditions required for securing their uniformity. The author has found by experiment, as Professor Geiger had already been led to conclude, that every part of the plant is poisonous,—the root, the leaves, and the fruit; and that the root is least active, the leaves much more so, but the fruit most active of all. The root is commonly held to be most active at Midsummer, when the plant is in full vegetation and coming into flower; but this belief is founded only on a single, and not altogether conclusive experiment made by Professor Orfila. The author found this part of the plant to be so feeble at all times, that its respective energy at different seasons could not be satisfactorily settled. The expressed juice of twelve ounces of roots had no appreciable effect on a small dog at the end of October or towards the close of June; but an alcoholic extract of six ounces at the beginning of May killed a rabbit in thirty-seven minutes when introduced into the cellular tissue. The leaves are commonly thought to be most energetic when the plant is coming into flower at Midsummer, and to be very feeble while it is young. The author finds it to be probable that the leaves are very active at Midsummer; but he has likewise observed, that they are eminently energetic in the young plant both at the beginning of November and in the month of March, before vegetation starts on the approach of genial weather; thirty-three grains of a carefully prepared alcoholic extract, representing one ounce and a third of fresh leaves, killed a rabbit in nine minutes when introduced into the cellular tissue. The fruit is most active when it is full-grown,